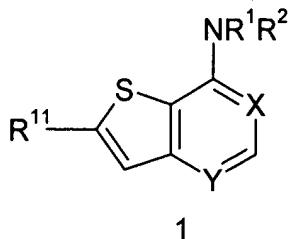


IN THE CLAIMS

Please cancel claims 49, 59-68 as follows.

1. (Previously presented) A compound of the formula of formula 1



1

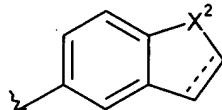
or a pharmaceutically acceptable salt, or hydrate thereof,

X is CH;

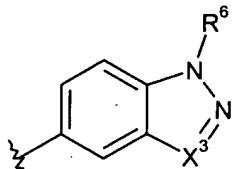
Y is N;

R¹ is H or C₁-C₆ alkyl;

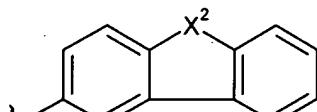
R² is a group of the formula



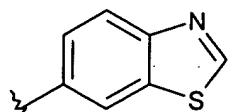
2



3

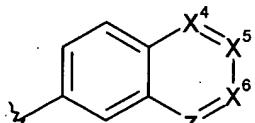


4



5

or



6

wherein X² is -S-, -N(R⁶)- or O, and X³, X⁴, X⁵, X⁶, and Z is N or CH, the dashed line in formula 2 represents an optional double bond, and the above R² groups of formulas 2, 4 and 6 are optionally substituted by 1 to 5 R⁵ substituents and the R² groups of formulas 3 and 5 are optionally substituted by 1 to 3 R⁵ substituents;

each R^5 is independently selected from halo, cyano, trifluoromethoxy, trifluoromethyl, $-C(O)R^8$, $-NR^6C(O)R^7$, $-C(O)NR^6R^7$, $-NR^6R^7$, $-OR^9$, $-SO_2NR^6R^7$, $-SO_2R^6$, $-NR^6SO_2R^7$, C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, $-(CH_2)_qO(CH_2)_qNR^6R^7$, $-(CH_2)_qO(CH_2)_qOR^9$, $-(CH_2)_qOR^9$, $-S(O)_j(C_1-C_6$ alkyl), $-(CH_2)_q(C_6-C_{10}$ aryl), $-(CH_2)_q(5$ to 10 membered heterocyclic), $-(CH_2)_qO(CH_2)_q(5$ to 10 membered heterocyclic), $-C(O)(CH_2)_q(5$ to 10 membered heterocyclic), $-(CH_2)_qNR^7(CH_2)_qNR^6R^7$, $-(CH_2)_qNR^7CH_2C(O)NR^6R^7$, $-(CH_2)_qNR^7(CH_2)_qNR^9C(O)R^8$, $-(CH_2)_qNR^7(CH_2)_qO(CH_2)_qOR^9$, $-(CH_2)_qNR^7(CH_2)_qS(O)_j(C_1-C_6$ alkyl), $-(CH_2)_qNR^7(CH_2)_qR^6$, $-SO_2(CH_2)_q(C_6-C_{10}$ aryl), and $-SO_2(CH_2)_q(5$ to 10 membered heterocyclic), wherein j is an integer from 0 to 2, t is an integer from 0 to 6, q is an integer from 2 to 6, the $-(CH_2)_q$ - and $-(CH_2)_t$ - moieties of the foregoing R^5 groups optionally include a carbon-carbon double or triple bond where t is an integer from 2 to 6, and the alkyl, aryl and heterocyclic moieties of the foregoing R^5 groups are optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl, $-C(O)R^8$, $-NR^6C(O)R^7$, $-C(O)NR^6R^7$, $-(CH_2)_qNR^6R^7$, $-SO_2R^6$, $-SO_2NR^6R^7$, C_1-C_6 alkyl, $-(CH_2)_q(5$ to 10 membered heterocyclic), $-(CH_2)_qO(CH_2)_qOR^9$, and $-(CH_2)_qOR^9$, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6;

each R^6 and R^7 is independently selected from H, C_1-C_6 alkyl, $-(CH_2)_q(C_6-C_{10}$ aryl), $-(CH_2)_q(5$ to 10 membered heterocyclic), $-(CH_2)_qO(CH_2)_qOR^9$, and $-(CH_2)_qOR^9$, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, and the alkyl, aryl and heterocyclic moieties of the foregoing R^6 and R^7 groups are optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl, $-C(O)R^8$, $-NR^9C(O)R^{10}$, $-C(O)NR^9R^{10}$, $-NR^9R^{10}$, C_1-C_6 alkyl, $-(CH_2)_q(C_6-C_{10}$ aryl), $-(CH_2)_q(5$ to 10 membered heterocyclic), $-(CH_2)_qO(CH_2)_qOR^9$, and $-(CH_2)_qOR^9$, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, with the proviso that where R^6 and R^7 are both attached to the same nitrogen, then R^6 and R^7 are not both bonded to the nitrogen directly through an oxygen;

each R^8 is independently selected from H, C_1-C_{10} alkyl, $-(CH_2)_q(C_6-C_{10}$ aryl), and $-(CH_2)_q(5$ to 10 membered heterocyclic), wherein t is an integer from 0 to 6;

each R^9 and R^{10} is independently selected from H and C_1-C_6 alkyl; and

R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached form a C_5-C_9 azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring wherein said C_5-C_9 azabicyclic, aziridinyl, azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring are optionally substituted by 1 to 5 R^5 substituents.

Claims 2-5 (Canceled)

6. (Previously presented) The compound of claim 1, wherein R¹¹ is -C(O)NR¹²R¹³ wherein R¹² and R¹³ taken together with the nitrogen to which they are attached form a C₅-C₉ azabicyclic, aziridinyl, azetidinyl, or pyrrolidinyl ring wherein said C₅-C₉ azabicyclic, aziridinyl, azetidinyl, or pyrrolidinyl ring are optionally substituted by 1 to 5 R⁵ substituents.

7. (Original) The compound of claim 6, wherein R¹¹ is -C(O)NR¹²R¹³ wherein R¹² and R¹³ taken together with the nitrogen to which they are attached form a C₅-C₉ azabicyclic, azetidinyl or pyrrolidinyl ring wherein said C₅-C₉ azabicyclic, azetidinyl or pyrrolidinyl ring is optionally substituted by 1 to 5 R⁵ substituents.

8. (Original) The compound of claim 7, wherein R¹¹ is -C(O)NR¹²R¹³ wherein R¹² and R¹³ taken together with the nitrogen to which they are attached form a C₅-C₉ azabicyclic ring, wherein said C₅-C₉ azabicyclic ring is optionally substituted by 1 to 5 R⁵ substituents.

9. (Original) The compound of claim 7, wherein R¹¹ is -C(O)NR¹²R¹³ wherein R¹² and R¹³ taken together with the nitrogen to which they are attached to form an azetidinyl ring, wherein said azetidinyl ring is optionally substituted by 1 to 5 R⁵ substituents.

10. (Original) The compound of claim 7, wherein R¹¹ is -C(O)NR¹²R¹³ wherein R¹² and R¹³ taken together with the nitrogen to which they are attached to form a pyrrolidinyl ring, wherein said pyrrolidinyl ring is optionally substituted by 1 to 5 R⁵ substituents.

11. (Canceled)

12. (Previously presented) The compound of claim 1, wherein said R² group is a group of formula 2 or 6, wherein said formulas 2 and 6 are optionally substituted by 1 to 5 R⁵ substituents.

13. (Previously presented) The compound of claim 1, wherein said compound is selected from the group consisting of:

Azetidin-1-yl-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
[7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-pyrrolidin-1-yl-methanone;
7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carboxylic acid cyclohexyl-methyl-amide;
(2-Methoxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

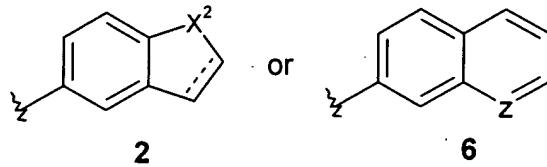
7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carboxylic acid methyl-(2-morpholin-4-yl-ethyl)-amide;
N-{1-[7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-acetamide;
N-Ethyl-N-{1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-acetamide;
(3-Methylamino-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
(3-Dimethylamino-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
(6-Amino-3-aza-bicyclo[3.1.0]hex-3-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
(3-Dimethylamino-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
(2-Methoxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
(3-Hydroxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
(2-Hydroxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
(3-Methoxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
(3-Ethoxy-azetidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
N-Methyl-N-{1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-acetamide;
cyclobutanecarboxylic acid {1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-amide; pharmaceutically acceptable salts of said compounds; and solvates of said compounds.

14. (Previously presented) The compound of claim 13, wherein said compound is selected from the group consisting of
(2S)-(2-Methoxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

(+/-)-N-Ethyl-N-{1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-acetamide;
(3S)-(3-Dimethylamino-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
(+/-)-N-Methyl-N-{1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-acetamide;
(2R)-(2-Methoxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
(3S)-(3-Hydroxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
(3R)-(3-Hydroxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
(+/-)-Cyclobutanecarboxylic acid {1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-amide;
6-Amino-3-aza-bicyclo[3.1.0]hex-3-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
(3S)-(3-Methoxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone; pharmaceutically acceptable salts of said compounds; and solvates of said compounds.

Claims 15-28. (Canceled)

29. (Previously presented) A compound of claim 1, wherein R¹ is H; R² is



X² is -N(R⁶)-, the dashed line in formula 2 represents an optional double bond, Z is CH or N and the above R² group of formulas 2 and 6 are optionally substituted by 1 to 5 R⁵.

Claims 30-33. (Canceled)

34. (Previously presented) The compound of claim 29, wherein R¹¹ is -C(O)NR¹²R¹³ wherein R¹² and R¹³ taken together with the nitrogen to which they are attached form a C₅-C₉

azabicyclic, aziridinyl, azetidinyl, or pyrrolidinyl ring wherein said C₅-C₉ azabicyclic, aziridinyl, azetidinyl, or pyrrolidinyl ring is optionally substituted by 1 to 5 R⁵ substituents.

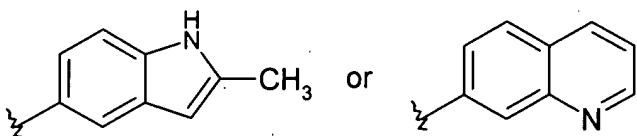
35. (Original) The compound of claim 34, wherein R¹¹ is -C(O)NR¹²R¹³ wherein R¹² and R¹³ taken together with the nitrogen to which they are attached form a C₅-C₉ azabicyclic, azetidinyl or pyrrolidinyl ring wherein said C₅-C₉ azabicyclic, azetidinyl or pyrrolidinyl ring is optionally substituted by 1 to 5 R⁵ substituents.

36. (Original) The compound of claim 35, wherein R¹¹ is -C(O)NR¹²R¹³ wherein R¹² and R¹³ taken together with the nitrogen to which they are attached form a C₅-C₉ azabicyclic ring wherein said C₅-C₉ azabicyclic ring is optionally substituted by 1 to 5 R⁵ substituents.

37. (Original) The compound of claim 36, wherein R¹¹ is -C(O)NR¹²R¹³ wherein R¹² and R¹³ taken together with the nitrogen to which they are attached form an azetidinyl ring wherein said azetidinyl ring is optionally substituted by 1 to 5 R⁵ substituents.

38. (Original) The compound of claim 37, wherein R¹¹ is -C(O)NR¹²R¹³ wherein R¹² and R¹³ taken together with the nitrogen to which they are attached form a pyrrolidinyl ring wherein said pyrrolidinyl ring is optionally substituted by 1 to 5 R⁵ substituents.

39. (Previously presented) A compound of claim 1, wherein R¹ is H; R² is



Claims 40-43. (Canceled)

44. (Previously presented) The compound of claim 39, wherein R¹¹ is -C(O)NR¹²R¹³ wherein R¹² and R¹³ taken together with the nitrogen to which they are attached form a C₅-C₉ azabicyclic, aziridinyl, azetidinyl, or pyrrolidinyl ring wherein said C₅-C₉ azabicyclic, aziridinyl, azetidinyl, and pyrrolidinyl ring are optionally substituted by 1 to 5 R⁵ substituents.

45. (Original) The compound of claim 44, wherein R¹¹ is -C(O)NR¹²R¹³ wherein R¹² and R¹³ taken together with the nitrogen to which they are attached form a C₅-C₉ azabicyclic, azetidinyl or pyrrolidinyl ring wherein said C₅-C₉ azabicyclic, azetidinyl or pyrrolidinyl ring are optionally substituted by 1 to 5 R⁵ substituents.

46. (Original) The compound of claim 45, wherein R¹¹ is -C(O)NR¹²R¹³ wherein R¹² and R¹³ taken together with the nitrogen to which they are attached form a C₅-C₉ azabicyclic ring, wherein said C₅-C₉ azabicyclic ring is optionally substituted by 1 to 5 R⁵ substituents.

47. (Original) The compound of claim 46, wherein R¹¹ is -C(O)NR¹²R¹³ wherein R¹² and R¹³ taken together with the nitrogen to which they are attached form an azetidinyl ring, wherein said azetidinyl ring is optionally substituted by 1 to 5 R⁵ substituents.

48. (Original) The compound of claim 47, wherein R¹¹ is -C(O)NR¹²R¹³ wherein R¹² and R¹³ taken together with the nitrogen to which they are attached form a pyrrolidinyl ring, wherein said pyrrolidinyl ring is optionally substituted by 1 to 5 R⁵ substituents.

49. (Canceled)

Claims 50-58. (Canceled)

59. (Canceled)

60. (Canceled)

61. (Canceled)

62. (Canceled)

63. (Canceled)

64. (Canceled)

65. (Canceled)

66. (Canceled)

67. (Canceled)

68. (Canceled)